



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,256	07/03/2003	Gerhard Reichert	1663-AI	4893
27542	7590	06/02/2004	EXAMINER	
SAND & SEBOLT				AMIRI, NAHID
AEGIS TOWER, SUITE 1100				
4940 MUNSON STREET, NW				
CANTON, OH 44718-3615				
				ART UNIT
				PAPER NUMBER
				3635

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/613,256	REICHERT, GERHARD
	Examiner	Art Unit
	Nahid Amiri	3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 July 2003.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
 4a) Of the above claim(s) 22-28 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-21 and 29 is/are rejected.
 7) Claim(s) 9 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 03 July 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 17 November 2003.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Election/Restrictions

1. The inventions are distinct, each from the other because of the following reasons:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-21, 29, drawn to muntin bar element, classified in class 52, subclass 455.
- II. Claims 22-28, drawn to apparatus of a spacer, classified in class 52, subclass 786.13.

Inventions I and II are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions used as spacer between glass panes.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Fred H. Zollinger on May 20, 2004 a provisional election was made to group I claims 1-21, 29 without traverse to prosecute the invention apparatus of muntin bar element. Affirmation of this election must be made by applicant in replying to this Office action. Claims 22-28 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **the spacer wherein the body defines a plurality of cavities** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims 9 objected to because of the following informalities: It is not clear what applicant is referring to as accommodating element.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,345,743 Baier.

In regard to claim 1: Baier discloses the claimed invention Fig. 4, column 2, line 9-21, a muntin bar element 22 adapted to be disposed between opposed panes of glass 12 and 14 in a glazing unit; the muntin bar element 22 comprising: a body having opposed base walls 24 separated by the height of the body; each base wall 24 adapted to be disposed adjacent an interior surface of the glass panes 12 and 14; the body defining at least one cavity between two legs with cross sectional area, column 2, line 31-32, an adhesive 34 disposed on at least one of the base walls 24; the adhesive 34 adapted to connect the body to one of the opposed panes of glass 14; the base wall 24 having the adhesive 34 defining a body width.

In regard to claims 2-3: Baier discloses the claimed invention Fig. 2, the muntin bar element 22 wherein the body defines a longitudinal direction; the insulating cavity between two legs extending and continuous in the longitudinal direction.

In regard to claim 7: Baier discloses the claimed invention column 3, line 60-62, the muntin bar 22 wherein the body 24 is fabricated from a foam material.

In regard to claim 8: Baier discloses the claimed invention column 3, line 62-64, the muntin bar 22 wherein the body includes a desiccant.

In regard to claim 9: Baier discloses the claimed invention Fig. 4, column 2, line 23-30, the muntin bar 22 wherein the body includes accommodating elements 32.

In regard to claim 10: Baier discloses the claimed invention Fig. 4, column 2, line 23-30, the muntin bar 22 wherein the accommodating elements 32 are slits defined by the body; the slits extending inwardly from opposite sides of the body on outer surface 30.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 9, 11-13, 14-21, 29 are rejected under 35 U.S.C. 102(a) as being anticipated by Pub. No.: US 2004/0079047 A1 Peterson.

In regard to claim 1: Peterson discloses the claimed invention Fig. 2 page 2, paragraph 0033, the spacer 12 including body having opposed base walls separated by the height of the body which adapted to be disposed adjacent and interior surface of the glass panes 14a and 14b, page 3, paragraph 0035, the body having at least one insulating cavity 40 with cross sectional area, page 3, paragraph 0039, having adhesive disposed on at least one of the base walls adapted to connect the body to one of the opposed panes 14a which defining a body width and the base wall having the cross section which larger than the cross sectional area of the insulating cavity.

In regard to claims 9, 11: Peterson discloses the claimed invention Fig. 1, the body includes the accommodating elements wherein the accommodating elements including at least one corrugation.

In regard to claim 12: Peterson discloses the claimed invention Fig. 1, the body includes the accommodating elements wherein the accommodating elements including a plurality of corrugation.

In regard to claim 13: Peterson discloses the claimed invention page 3, paragraph 0039, having adhesive disposed other side of the base walls adapted to connect the body to the other of the opposed panes of glass 14b which defining a body width and the base wall having the cross section which larger than the cross sectional area of the insulating cavity.

In regard to claim 14: Peterson discloses the claimed invention Fig. 1, page 2, paragraph 0033, a spacer adapted to be disposed between opposed panes of glass 14a and 14b in a glazing unit 10; the spacer having a body having opposed base walls separated by the height of the body; each base wall adapted to be disposed adjacent an interior surface of the glass panes 14a and 14b; the body including an accommodating element that permits that height of the body to adjust with the distance between the opposed panes of glass 14a and 14b in the glazing unit 10.

In regard to claim 15: Peterson discloses the claimed invention page 3, paragraph 0039, having adhesive disposed on both base walls adapted to connect the base wall to the pane of glass 14a and 14b.

In regard to claim 16: Peterson discloses the claimed invention Fig. 1, page 2, paragraph 0035, the spacer 18a sandwiched between glass panes 14a, 14b having accommodating elements are slits.

In regard to claim 17: Peterson discloses the claimed invention Fig. 1, page 3, paragraph 0042, the spacer 18a having at least one corrugation 70.

In regard to claim 18: Peterson discloses the claimed invention Fig. 1, page 3, paragraph 0042, the spacer 18a having a plurality of corrugation 70.

In regard to claim 19: Peterson discloses the claimed invention Fig. 1, page 3, paragraph 0035, the spacer 18 wherein the body defines a longitudinal cavity 40.

In regard to claim 20: Peterson discloses the claimed invention Fig. 1, wherein the corrugations allows the body to move between expanded and collapsed positions; the collapsed position of the body closing the longitudinal cavity.

In regard to claim 21: Peterson discloses the claimed invention Fig. 1, page 3, paragraph 0035, the spacer 18 wherein the body defines a longitudinal cavity 40.

In regard to claim 29: Peterson discloses the claimed invention Fig. 2 page 2, paragraph 0033, the spacer 12 including body having opposed base walls separated by the height of the body which adapted to be disposed adjacent and interior surface of the glass panes 14a and 14b, page 3, paragraph 0035, the body having at least one insulating cavity 40, page 3, paragraph 0039, having adhesive disposed on at least one of the base walls adapted to connect the body to one of the opposed panes 14a or 14b which defining a body width and the base width being greater than the body height.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,345,743 Baier in view of US Patent No. 3,946,531 Armstrong.

In regard to claims 4-5: Baier discloses the claimed invention except the muntin bar element wherein the body defines a plurality of insulating cavities; each of the insulating cavities extending continuously in the longitudinal direction. Armstrong teaches Fig. 3, the muntin element 24 having a plurality of cavity 38 extending continuously in the longitudinal direction. It would have been an obvious matter of design choice to provide the space between cavities being equal to the width of the either insulating cavity in order to insulate the glass panes.

In regard to claim 6: Baier and Armstrong disclose the claimed invention except the muntin bar element wherein each insulating cavity has a width; the space been the insulating

cavities being equal to or greater than the width of either insulating cavity. It would have been an obvious matter of design choice to provide the space between cavities being equal to the width of the either insulating cavity in order to insulate the glass panes.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,439,716 Larsen

US Patent No. 2,848,762 Peterson

US Patent No. 4,598,520 Ellstrom

US Patent No. 6,425,221 B1 Reichert

US Patent No. 4,652,472 Davies

US Patent No. 4,989,384 Kinghorn et al.

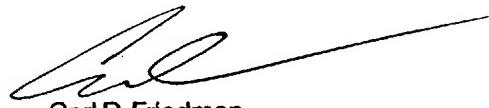
US Patent No. 3,512,320 Ferron et al.

US Patent No. 4,546,540 Davies at al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (703) 305-4241 and Fax number is 703-305-7687. The examiner can normally be reached on Monday-Friday from 8:00-5:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Carl Friedman can be reached at (703) 308-0839.

na *w*

May 17, 2002



Carl D. Friedman
Supervisory Patent Examiner
Group 3600